

CLAIM AMENDMENTS

Claim 1 (currently amended): A golf ball, comprising:

a ball cover comprising a first hemispheric cup and a second hemispheric cup attached to said first hemispheric cup edge to edge to form a hollow spheroid; and

a solid ball core covered by said ball cover;

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a wherein said first hemispheric cup has two identical first semi-conical engagement edges symmetrically outwardly projecting at two sides thereof and two identical first semi-conical connection edges inwardly projecting between said two first semi-conical engagement edges, wherein said two first semi-conical engagement edges are symmetrically and continuously extended between said two first semi-conical connection edges so as to form a continuous first joint edge for said first hemispheric cup;

wherein the second hemispheric cup has two identical second semi-conical engagement edges symmetrically outwardly projecting at two sides thereof and two identical second semi-conical connection edges inwardly projecting between said second first semi-conical engagement edge, wherein said two second semi-conical engagement edges are symmetrically and continuously extended between said two second semi-conical connection edges so as to form a continuous second joint edge for said second hemispheric cup;

wherein a cone height of each of said first and second semi-conical engagement edges is equal to a cone height of each of said first and second semi-conical connection edges, and a size and shape of said first hemispheric cup and the second hemispheric cup are identical and symmetrical, wherein said two second semi-conical engagement edges are fittingly engaged with said two first semi-conical connection edges respectively while said two second semi-conical connection edges are fittingly engaged with said two first semi-conical engagement edges respectively, so as to integrally attach unite said first hemispheric cup and said second hemispheric cup together to form said ball cover.

Claim 2 (original): A golf ball, as recited in claim 1, wherein said cone height of said first and second semi-conical engagement edges and said first and second semi-conical connection edges is equal to a radius of said first and second hemispheric cups.

Claim 3 (original): A golf ball, as recited in claim 1, wherein said first and second hemispheric cups share a common center point and all said first and second semi-conical engagement edges and said first and second semi-conical connection edges are curved and smooth edge surfaces extended radially from said center point to a circumference of said ball cover, wherein said continuous first joint edge of said first hemispheric cup is intercrossed with said continuous second joint edge of said second hemispheric cup that said first and second semi-conical engagement edges are respectively engaged with said second and first semi-conical connection edges.

Claim 4 (original): A golf ball, as recited in claim 2, wherein said first and second hemispheric cups share a common center point and all said first and second semi-conical engagement edges and said first and second semi-conical connection edges are curved and smooth edge surfaces extended radially from said center point to a circumference of said ball cover, wherein said continuous first joint edge of said first hemispheric cup is intercrossed with said continuous second joint edge of said second hemispheric cup that said first and second semi-conical engagement edges are respectively engaged with said second and first semi-conical connection edges.

Claim 5 (currently amended): A golf ball, as recited in claim 1, wherein said solid ball core comprises a first core body and a second core body attached to said first core body to form a spheroid;

wherein said first core body has a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

wherein said second core body has a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion;

a wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and said second joint portion are identical and symmetrical, ~~so that~~ wherein said two second semi-conical engagement tongues are fittingly engaged in said two first semi-conical engagement grooves respectively while said first semi-conical engagement tongues are fittingly engaged in said two second semi-conical engagement grooves respectively, so as to integrally attach ~~unite~~ said first joint portion and said second joint portion together to form said spheroid of said solid ball core.

Claim 6 (currently amended): A golf ball, as recited in claim 4, wherein said solid ball core comprises a first core body and a second core body attached to said first core body to form a spheroid;

wherein said first core body has a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

wherein said second core body has a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion;

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a wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and said second joint portion are identical and symmetrical, ~~so that~~ wherein said two second semi-conical engagement tongues are fittingly engaged in said two first semi-conical engagement grooves respectively while said first semi-conical engagement tongues are fittingly engaged in said two second semi-conical engagement grooves respectively, so as to integrally attach ~~unite~~ said first joint portion and said second joint portion together to form said spheroid of said solid ball core.

Claim 7 (original): A golf ball, as recited in claim 5, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

Claim 8 (original): A golf ball, as recited in claim 6, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

Claim 9 (original): A golf ball, as recited in claim 5, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in

said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 10 (original): A golf ball, as recited in claim 7, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 11 (original): A golf ball, as recited in claim 8, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 12 (original): A golf ball, as recited in claim 9, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 13 (original): A golf ball, as recited in claim 10, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 14 (original): A golf ball, as recited in claim 11, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 15 (currently amended): A golf ball, comprising:

a ball cover having a hollow spherical shaped; and

a solid ball core, which is covered by said ball cover, comprising a first core body and a second core body attached to said first core body to form a spheroid;

wherein said first core body has a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

wherein said second core body has a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion;

wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and

said second joint portion are identical and symmetrical, ~~so that~~ wherein said two second semi-conical engagement tongues are fittingly engaged in said two first semi-conical engagement grooves respectively while said first semi-conical engagement tongues are fittingly engaged in said two second semi-conical engagement grooves respectively, so as to integrally attach ~~unite~~ said first joint portion and said second joint portion together to form said spheroid of said solid ball core.

Claim 16 (original): A golf ball, as recited in claim 15, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

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Claim 17 (original): A golf ball, as recited in claim 15, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 18 (original): A golf ball, as recited in claim 16, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 19 (original): A golf ball, as recited in claim 17, wherein said first and second conically curved tongue surfaces and said first and second conically curved

grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

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a Claim 20 (original): A golf ball, as recited in claim 18, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 21 (new): A method of manufacturing a golf ball, comprising the steps of:

(a) providing a solid ball core;

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a (b) providing a first hemispheric cup which cup has two identical first semi-conical engagement edges symmetrically outwardly projecting at two sides thereof and two identical first semi-conical connection edges inwardly projecting between said two first semi-conical engagement edges, wherein said two first semi-conical engagement edges are symmetrically and continuously extended between said two first semi-conical connection edges so as to form a continuous first joint edge for said first hemispheric cup;

(c) providing a second hemispheric cup which has two identical second semi-conical engagement edges symmetrically outwardly projecting at two sides thereof and two identical second semi-conical connection edges inwardly projecting between said second first semi-conical engagement edge, wherein said two second semi-conical engagement edges are symmetrically and continuously extended between said two second semi-conical connection edges so as to form a continuous second joint edge for said second hemispheric cup, wherein a cone height of each of said first and second semi-conical engagement edges is equal to a cone height of each of said first and second semi-conical connection edges, and a size and shape of said first hemispheric cup and the second hemispheric cup are identical and symmetrical;

(d) placing said solid ball core between said first hemispheric cup and said second hemispheric cup; and

(e) integrally attaching said first hemispheric cup and said second hemispheric cup together by fittingly engaging said two second semi-conical engagement edges with said two first semi-conical connection edges respectively while fittingly engaging said two second semi-conical connection edges with said two first semi-conical engagement edges respectively so as to form a ball cover covering said solid ball core.

Claim 22 (new): The method, as recited in claim 21, wherein in the step (c), said cone height of said first and second semi-conical engagement edges and said first and second semi-conical connection edges is equal to a radius of said first and second hemispheric cups.

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Claim 23 (new): The method, as recited in claim 21, wherein said first and second hemispheric cups share a common center point and all said first and second semi-conical engagement edges and said first and second semi-conical connection edges are curved and smooth edge surfaces extended radially from said center point to a circumference of said ball cover, wherein said continuous first joint edge of said first hemispheric cup is intercrossed with said continuous second joint edge of said second hemispheric cup that said first and second semi-conical engagement edges are respectively engaged with said second and first semi-conical connection edges.

Claim 24 (new): The method, as recited in claim 22, wherein said first and second hemispheric cups share a common center point and all said first and second semi-conical engagement edges and said first and second semi-conical connection edges are curved and smooth edge surfaces extended radially from said center point to a circumference of said ball cover, wherein said continuous first joint edge of said first hemispheric cup is intercrossed with said continuous second joint edge of said second hemispheric cup that said first and second semi-conical engagement edges are respectively engaged with said second and first semi-conical connection edges.

Claim 25 (new): The method, as recited in claim 21, wherein the step (a) further comprises the steps of:

(a-1) providing a first core body having a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically

indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

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a (a-2) providing a second core body having a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion, wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and said second joint portion are identical and symmetrical;

(a-3) fittingly engaging said two second semi-conical engagement tongues in said two first semi-conical engagement grooves respectively while fittingly engaging said first semi-conical engagement tongues in said two second semi-conical engagement grooves respectively; and

(a-4) attaching said first core body and said second core body by integrally attaching said first joint portion and said second joint portion together to form said solid ball core.

Claim 26 (new): The method, as recited in claim 24, wherein the step (a) further comprises the steps of:

(a-1) providing a first core body having a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically

indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

a² (a-2) providing a second core body having a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion, wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and said second joint portion are identical and symmetrical;

(a-3) fittingly engaging said two second semi-conical engagement tongues in said two first semi-conical engagement grooves respectively while fittingly engaging said first semi-conical engagement tongues in said two second semi-conical engagement grooves respectively; and

(a-4) attaching said first core body and said second core body by integrally attaching said first joint portion and said second joint portion together to form said solid ball core.

Claim 27 (new): The method, as recited in claim 25, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

Claim 28 (new): The method, as recited in claim 26, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

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a Claim 29 (new): The method, as recited in claim 25, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 30 (new): The method, as recited in claim 27, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 31 (new): The method, as recited in claim 28, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-

conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 32 (new): The method, as recited in claim 29, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 33 (new): The method, as recited in claim 30, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

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Claim 34 (new): The method, as recited in claim 31, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

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Claim 35 (new) A method of manufacturing a golf ball, comprising the steps of:

(a) providing a first core body having a first joint portion which comprises two identical first semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical first semi-engagement grooves symmetrically indented between said two first semi-conical engagement tongues, wherein said two first semi-conical engagement tongues respectively define two first conically curved tongue surfaces symmetrically facing with each other, and said two first semi-conical engagement grooves respectively define two first conically curved groove surfaces symmetrically and continuously extended between said two first conically curved tongue surfaces, so as to form a continuous first joint surface for said first joint portion;

(b) providing a second core body having a second joint portion which comprises two identical second semi-conical engagement tongues symmetrically projecting at two sides thereof so as to define two identical second semi-engagement grooves symmetrically indented between said two second semi-conical engagement tongues, wherein said two second semi-conical engagement tongues respectively define

two second conically curved tongue surfaces symmetrically facing with each other, and said two second semi-conical engagement grooves respectively define two second conically curved groove surfaces symmetrically and continuously extended between said two second conically curved tongue surfaces, so as to form a continuous second joint surface for said second joint portion, wherein a cone height of each of said first and second semi-conical engagement tongues is equal to a cone height of each of said first and second semi-conical engagement grooves, and thus a size of the shape of said first joint portion and said second joint portion are identical and symmetrical;

(c) fittingly engaging said two second semi-conical engagement tongues in said two first semi-conical engagement grooves respectively while fittingly engaging said first semi-conical engagement tongues in said two second semi-conical engagement grooves respectively;

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a (d) attaching said first core body and said second core body by integrally attaching said first joint portion and said second joint portion together to form a solid ball core;

(e) providing a ball cover having a hollow spherical shape; and

(f) covering said solid ball core by said ball cover.

Claim 36 (new): The method, as recited in claim 35, wherein said cone height of said first and second semi-conical engagement tongues and said first and second semi-conical engagement grooves is equal to a radius of said first and second joint portions.

Claim 37 (new): The method, as recited in claim 35, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-

conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

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Claim 38 (new): The method, as recited in claim 36, wherein said first and second joint portions share a common center point and all said first and second conically curved tongue surface and said first and second conically curved groove surfaces of said first and second joint portions are curved and smooth surfaces extended outwardly and radially from said center point to a circumference of said solid ball core, wherein said first joint portion is intercrossed with said second joint portion that said first and second semi-conical engagement tongues are respectively engaged in said second and first semi-conical engagement grooves, and said first and second semi-conical engagement tongues are embraced by said second and first semi-conical engagement grooves respectively.

Claim 39 (new): The method, as recited in claim 37, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .

Claim 40 (new): The method, as recited in claim 38, wherein said first and second conically curved tongue surfaces and said first and second conically curved grooves of said first second joint portions are curved and smooth surfaces are inclined from said center point at 45° .
